

San Fernando

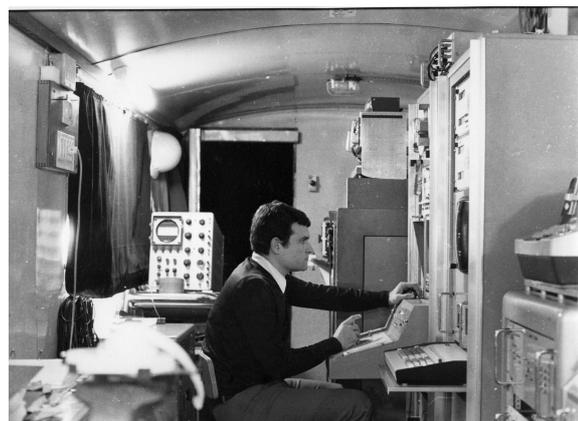
1975-1979 Collaboration with the French GRGS group. First generation mobile station with a ruby laser, 1J and 30ns pulse width and a 40cm aperture receiving telescope. The measuring precision of $\sim 1\text{m}$. Installed on grounds of the Royal Naval Observatory in San Fernando (ROA, Spain).



Mobile station first generation of French GRGS



Mount



Jean Luis Hatat. Station Chief

1980- First Spanish station installed in the dome on top of ROA main building in collaboration with the French CRGS. A first generation laser, 1J and 30ns pulse width, Receiver Telescope of 40cm. Measuring precision of ~1m.



Mount



Installing the mount in the dome on top ROA main building



Observation room

1983 – 1987 A second generation laser station replaced the first generation one: Ruby Laser, 3J and 10ns pulse width. Receiver telescope of 60cm. Measuring precision of ~30cm. Also installed in collaboration with the French group.



Mount



Gaignobet (CRGS) and M. Quijano (ROA)

1990 A new third generation SLR station replaced the previous station, with a YAG-Nd laser, receiver telescope with aperture 60cm. Measurement precision of 6 cm.



YAG-Nd laser



Control Rack



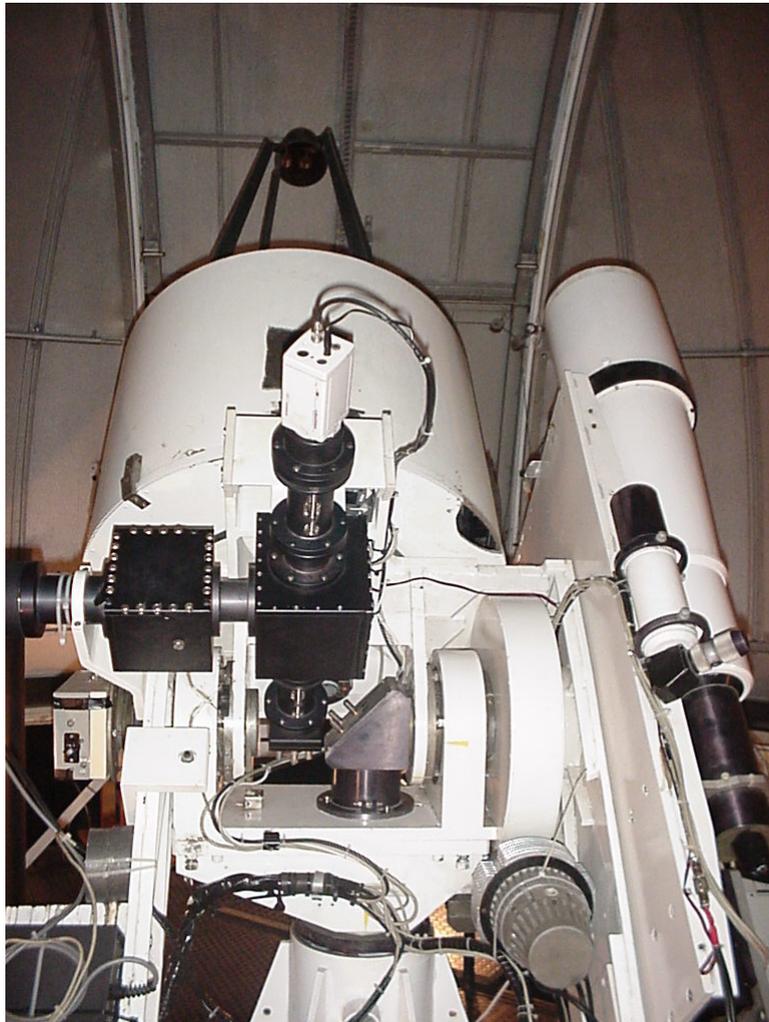
Dome

1998 – A new dome is installed on top ROA main building .



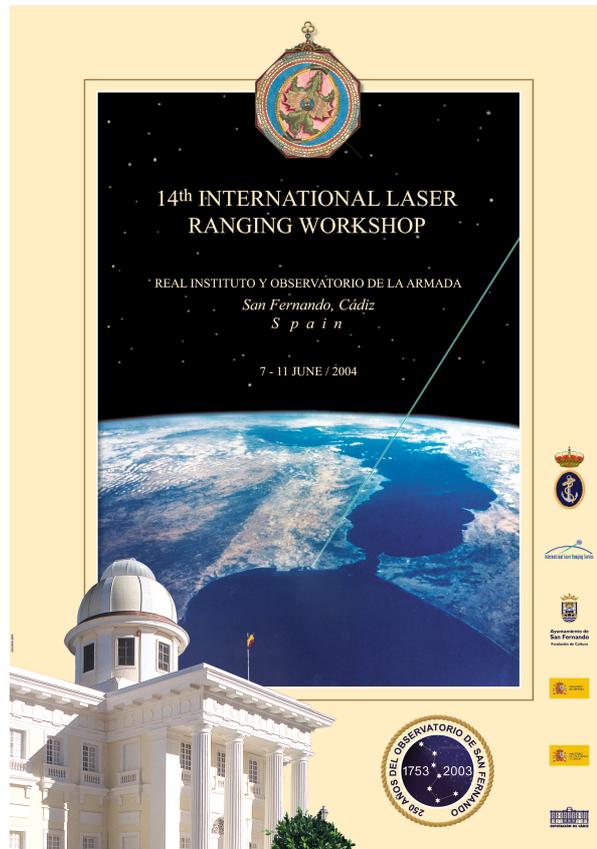
New dome

2001 – A new optical reception system based on C-SPAD is installed. SLR station with Nd-YAG Laser, Receiver Telescope of aperture 60cm and measurement precision de 1,5cm.



Mount with the new reception system

2004 – XIV ILRS Workshop at San Fernando.



Mike Pearlman, Georg Gárte and Jose M. Dávila



Group photo in front of the main building of the ROA

2014 – Current SLR station: Nd-YAG laser, firing rate 10Hz, Output power 25mJ and 50ps pulse width. Receiver telescope of 60cm aperture, finder scope camera with high sensitivity and accuracy in the measurement of 1-1,5cm.



Mount



Control Rack